WHAT IS CLAIMED IS

1. An optical recording medium comprising:

a substrate having a land and a groove alternately arranged in a predetermined direction;

a data recording region provided on the land and the groove; and

an identification mark recording region provided on only one of the land and the groove and recorded with a data block identification mark.

2. The optical recording medium as claimed in claim 1, wherein the data block identification mark is made of a projecting part formed on the groove and having approximately the same height as the land or, made of a cavity part formed on the land and having approximately the same depth as the groove.

3. The optical recording medium as claimed in claim 1, further comprising:

a first identification information recording region recorded with identification information for identifying the data recording region on the land; and

a second identification information recording region recorded with identification information for

identifying the data recording region on the groove, said data block identification mark being recorded on only one of the first identification information recording region and the second identification recording region.

4. The optical recording medium as claimed in claim 3, wherein the second identification recording region is staggered with respect to the first identification information recording region in a direction of a track which is formed by the land or the groove.

5. The optical recording medium as claimed in claim 3, wherein information for identifying the data recording region is recorded by a magneto-optical recording.

6. The optical recording medium as claimed in claim 2, wherein a width of the projecting part forming the data block identification mark is greater than or equal to a width of the land, and a width of the cavity part forming the data block identification mark is greater than or equal to a width of the groove.

7. The optical recording medium as claimed in claim 1, wherein a depth of the groove forming the data recording region is different from a height of the projecting part and a depth of the cavity part which form the data block identification mark.

Fig. 12

8. The optical recording medium as claimed in claim 1, further comprising:

a buffer track formed solely of a track and arranged at a boundary of the regions which are divided in the predetermined direction on the substrate.

Fig. 11

9. A method of detecting a data block identification mark from an optical recording medium which is provided with a substrate having a land and a groove alternately arranged in a predetermined direction, a data recording region provided on the land and the groove, and an identification mark recording region provided on only one of the land and the groove and recorded with a data block identification mark, said method comprising the step of:

(a) detecting the data block identification mark from a land or a groove having no identification mark recording region, based on a crosstalk signal from a data block identification mark of an adjacent groove or land.

10. An optical storage unit for writing and/or reading information from an optical recording medium which is provided with a substrate having a land and a groove alternately arranged in a predetermined direction, a data recording region provided on the land and the groove, and an identification mark recording region provided on only one of the land and the groove and recorded with a data block identification mark, said optical storage unit comprising:

an identification mark detecting section detecting the data block identification mark from a land or a groove having no identification mark recording region, based on a crosstalk signal from a data block identification mark of an adjacent groove or land;

a first detector detecting data recorded on the data recording region; and

a second detector detecting the data block identification mark.

11. The optical storage unit as claimed in claim 10, wherein said second detector detects components of a light beam which is split into at least two in a direction of a track on the optical recording medium and/or a direction traversing the track on the optical recording medium.

12. The optical storage unit as claimed in claim 11, wherein said identification mark detecting section detects the data block

identification mark from one of a sum signal and a difference signal derived from two output signals from the second detector which detects the light which is split into two in the direction of the track on the optical recording medium.

13. The optical storage unit as claimed in claim 11, wherein said identification mark detecting section detects the data block identification mark from one of a sum signal and a first difference signal derived from two output signals from the second detector which detects the light which is split into two in the direction traversing the track on the optical recording medium.

14. An optical storage unit usable with an optical recording medium which has a track groove and pits with the same depth, and the track groove has a predetermined depth suited for data reproduction, said optical storage unit comprising:

a photodetector detecting a returning light which is reflected from the optical recording medium and is split into at least two in a direction of the track on the optical recording medium; and

an ID signal detector obtaining a difference signal of output signals of the photodetector which detects the light which is split into at least two in the direction of the track on the optical recording medium, and outputting the difference signal as the ID signal.

15. An optical storage unit for optically reading from an optical recording medium an ID signal which indicates a position on the optical recording medium by embossed pits, said optical storage unit comprising:

a photodetector, having detector parts divided into at least two in a direction corresponding to a track on the optical recording medium, detecting returning light beam which is reflected from the optical recording medium; and

an ID signal detector detecting a difference signal in the direction of the track based on output signals of the detector parts of the photodetector, and outputting the difference signal as a detected ID signal.

16. The optical storage unit as claimed in claim 13, wherein:

said detector parts of the photodetector are divided so as to detect components of the light beam split into two in directions corresponding to the track on the optical recording medium, and so as to detect components of the light beam split into two in directions corresponding to the direction traversing the track on the optical recording medium; and

said ID signal detector obtains a second difference signal in the direction traversing the track based on output signals of the detector parts of the photodetector, and outputs the second difference signal as a reproduced optical signal.

17. The optical storage unit as claimed in claim 16, further comprising:

a Foucault unit splitting a returning light beam reflected from the optical recording medium into three in directions corresponding to the track on the optical recording medium, and irradiating the split beam on the photodetector,

said ID signal detector obtaining the first difference signal using a detection result of the photodetector excluding a central portion of the returning light beam.

18. The optical storage unit as claimed in claim 15, wherein said ID signal detector obtains a sum total signal in a direction corresponding to the track on the optical recording medium based on output signals of the detector parts of the photodetector, and outputting the sum total signal as the detected ID signal.

19. The optical storage unit as claimed in claim 16, wherein said ID signal detector obtains a sum total signal in a direction corresponding to the track on the optical recording medium based on output signals of the detector parts of the photodetector, and outputting the sum total signal as the detected ID signal.

20. The optical storage unit as claimed in claim 18, further comprising:

an output section selectively outputting one of the difference signal and the sum total signal as the detected ID signal.

21. The optical storage unit as claimed in claim 20, further comprising:

a controller automatically controlling a switching of the output section depending on a type or capacity of the optical recording medium.

22. The optical storage unit as claimed in claim 20, wherein:

the optical recording medium comprises a magneto-optical recording medium; and

said output section selectively outputs the difference signal as the detected ID signal when a depth of the embossed pits of the magneto-optical recording medium is approximately 80 nm or less.

23. The optical storage unit as claimed in claim 19, further comprising:

an output section selectively outputting one of the difference signal and the sum total signal as the detected ID signal.

24. The optical storage unit as claimed in claim 23, further comprising:

a controller automatically controlling a switching of the output section depending on a type or capacity of the optical recording medium.

25. The optical storage unit as claimed in claim 23, wherein:

the optical recording medium comprises a magneto-optical recording medium; and

said output section selectively outputs the first difference signal as the detected ID signal when a depth of embossed pits of the magneto-optical recording medium is approximately 80 nm or less.